

# Intel® System Studio 2018 Update 1

## System Requirements

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## 1 Introduction

This document provides the information on the **system requirements** for the **Intel® System Studio 2018 Update 1** product and provides pointers to where you can find the system requirements specific to individual tool products.

Intel® System Studio supports development for Android\*, Embedded Linux\*, Yocto Project\* and Wind River Linux\* deployment targets from Linux\*, Windows\* or macOS\* host.

For full product information for the previous release, as well as links to evaluation licenses (30-days), please refer to Intel® System Studio product webpage <https://software.intel.com/intel-system-studio>.

Individual Intel® System Studio components may have a broader range of supported features/targets than the suite level support covers. See the [system requirements](#) of the individual components for detailed information

## 2 Supported Host Operating Systems

Below is the list of distributions supported by most components. Intel System Studio supports Intel® 64 Host architectures only.

### Linux\* Host:

- Red Hat Enterprise\* Linux\* 6, 7
- Ubuntu\* 14.04 LTS, 16.04 LTS
- Fedora\* 24, 25, 26
- Wind River\* Linux\* 7, 8, 9
- openSUSE\* Leap 42.2
- SUSE LINUX Enterprise Server\* 12 SP1
- CentOS\* 7.1
- Wind River Linux LTS\* 17

### Windows\* Host:

- Microsoft Windows\* 7, 8.x, 10

### macOS\* Host:

- macOS\* 10.12, 10.13

In most cases, Intel® System Studio will install and work on a standard Linux\* OS distribution based on current Linux\* kernel versions without problems, even if they are not listed below.

You will, however, receive a warning during installation for Linux\* OS distributions that are not listed.

### 3 Supported Target Operating Systems

#### Linux target:

- Red Hat Enterprise\* Linux\* 6 and 7
- CentOS\* 7.1
- Yocto project\* 1.7, 2.0, 2.2 based environment
- Ubuntu\* 14.04, 16.04
- Wind River\* Linux\* 7, 8, 9 based environment
- SUSE LINUX Enterprise Server\* 11, 12
- Wind River Linux LTS\* 17

#### Windows target:

- Microsoft Windows\* 7,8.x,10 (PC & Embedded)

#### Android target :

- Android\* M, N

### 4 Supported Target Hardware Platforms

- Development platform based on the Intel® Atom™ processor Z5xx, N4xx, N5xx, D5xx, E6xx, N2xxx, D2xxx, E3xxx, Z2xxx, Z3xxx, C2xxx, or Intel® Atom™ processor CE4xxx, CE53xx and the Intel® Puma™ 6 Media Gateway
- Intel® Atom™ Processors X Series Cxxx, Exxx, Zxxx
- Development platform based on a 2nd, 3rd, 4th, 5th, 6th, 7th or 8th generation Intel® Core™ processor
- Intel® Xeon® processors based on 2nd, 3rd 4th, 5th or 6th generation
- Intel® Xeon® Scalable processors series

## 5 Space Requirement by Component

| Component                                             | Minimum RAM | Recommended RAM | Disk Space                                                       |
|-------------------------------------------------------|-------------|-----------------|------------------------------------------------------------------|
| Intel® C/C++ Compiler                                 | Host 1 GB   | Host 2 GB       | Host 4 GB for all features<br>Target – 13 MB(IA-32)/15 MB(IA-64) |
| GNU* GDB                                              | 1 GB        | 2 GB            | 200 MB                                                           |
| Intel® Inspector                                      | 2 GB        | 4 GB            | 350 MB                                                           |
| Intel® Integrated Performance Primitives (Intel® IPP) | 1 GB        | 4 GB            | 2-4 GB                                                           |
| Intel® Math Kernel Library (Intel® MKL)               | 1GB         | 4 GB            | 2.3 GB                                                           |
| Intel® System Debugger                                | 1 GB        | 2 GB            | 1.4 GB                                                           |
| Intel® VTune™ Amplifier                               | 2 GB        | 4 GB            | 650 MB                                                           |
| Docker* build workflow                                | 4 GB        |                 | 20GB for Docker images and containers                            |

## 6 Prerequisites by Component

**Intel® System Studio 2018 Update 1** might also require installation of webkitgtk for using Eclipse\*:

- Linux\* host -
  - RedHat/Fedora: dnf install webkitgtk
  - Ubuntu/Debian : apt-get install libwebkitgtk-3.0.0

### Intel® C/C++ Compiler

- Linux\* target -
  - Linux Developer tools component installed, including gcc, g++ and related tools
    - gcc versions 4.3 - 6.3 supported
    - binutils versions 2.20-2.26 supported
  - Development for a 32-bit target on a 64-bit host may require optional library components (ia32-libs, lib32gcc1, lib32stdc++6, libc6-dev-i386, gcc-multilib, g++-multilib) to be installed from your Linux distribution.

## Docker\* based application workflow

- Using Intel® System Studio to target Ubuntu Desktop with the free "Community Edition" (CE) version of Docker\* requires Docker version 1.13.0 (Jan 2017 release) or later. We recommend that you install the latest version of Docker on your development system to ensure expected functionality.
- For details see the [Intel® System Studio Docker Install](#).

## Intel® VTune™ Amplifier

- Linux\* target
  - Linux\* Kernel version has to be 2.6.32 or higher for Intel® VTune™ Amplifier power and performance analysis.
  - [Kernel Configuration](#)

## Intel® System Debugger

- Linux\* host -
  - Install fxload package for all types of target communication
    - Ubuntu\*: sudo apt-get install fxload
    - Fedora\*: sudo yum install fxload
- Windows\* host -
  - Microsoft .NET Framework 4 (dotNetFx40\_Full\_x86\_x64.exe) Microsoft .NET Framework 3.5 SP1 runtime (pre-installed by default on Microsoft\* Windows\* 7)
    - Download Microsoft .NET Framework 4 web installer from Microsoft.com.
    - Run dotNetFx40\_Full\_x86\_x64.exe

## 7 Development environments supported

### Eclipse\* IDE

An Intel flavor of the Eclipse\* IDE is available for Intel® System Studio 2018. Check out the [What's new](#) page for more details

### Microsoft Visual Studio\* integration

To use the Microsoft Visual Studio development environment or command-line tools to build IA-32 or Intel® 64 architecture applications, one of:

- Microsoft Visual Studio 2017\* Professional Edition (or higher edition) with 'Desktop development with C++' component installed
- Microsoft Visual Studio 2015\* Professional Edition (or higher edition) with 'Common Tools for Visual C++ 2015' component installed
- Microsoft Visual Studio Community 2015\* with 'Common Tools for Visual C++ 2015' component installed
- Microsoft Visual Studio 2013\* Professional Edition (or higher edition) with C++ component installed
- Microsoft Visual Studio Community 2013\* with C++ component installed

To use command-line tools only to build IA-32 architecture applications, one of:

- Microsoft Visual C++ Express 2015 for Windows Desktop\*
- Microsoft Visual C++ Express 2013 for Windows Desktop\*

To use command-line tools only to build Intel® 64 architecture applications, one of:

- Microsoft Visual C++ Express 2015 for Windows Desktop\*
- Microsoft Visual C++ Express 2013 for Windows Desktop\*

## 8 Component System Requirements

| Component                                                | System Requirement                                                                                   |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| GNU* GDB                                                 | <a href="#">Windows host</a><br><a href="#">Linux host</a>                                           |
| Intel® C/C++ Compiler                                    | <a href="#">Windows host</a><br><a href="#">Linux host</a><br><a href="#">Windows target</a>         |
| Intel® Data Analytics Acceleration Library (Intel® DAAL) | <a href="#">All hosts</a>                                                                            |
| Intel® Integrated Performance Primitives (Intel® IPP)    | <a href="#">All hosts</a>                                                                            |
| Intel® Math Kernel Library (Intel® MKL)                  | <a href="#">All hosts</a>                                                                            |
| Intel® Threading Building Blocks (Intel® TBB)            | <a href="#">All hosts</a>                                                                            |
| Intel® Inspector                                         | <a href="#">All hosts</a>                                                                            |
| Intel® SoC Watch (Energy Analysis)                       | <a href="#">Windows target</a><br><a href="#">Linux target</a><br><a href="#">Android target</a>     |
| Intel® Graphics Performance Analyzers (Intel® GPA)       | <a href="#">All hosts</a>                                                                            |
| Intel® VTune™ Amplifier & Performance Snapshots          | <a href="#">All hosts(hardware requirements)</a><br><a href="#">All hosts(software requirements)</a> |
| Intel® Debug Extensions for WinDbg*                      | <a href="#">All hosts</a>                                                                            |
| Intel® System Debugger (System Debug)                    | <a href="#">Windows host</a><br><a href="#">Linux host</a>                                           |
| Intel® System Debugger (System Trace)                    | <a href="#">Windows host</a><br><a href="#">Linux host</a>                                           |
| MRAA IO Communication Layer                              | <a href="#">MRAA</a>                                                                                 |
| UPM Sensor and Actuator Library                          | <a href="#">UPM</a>                                                                                  |

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